EMERGENCY ESCAPE PROVISIONS

Provisions for emergency escape from the XC-132 airplane are shown in the accompanying diagram.

AIR ESCAPE

Although several points may possibly be used as air exits, the principal bail-out point from the flight compartment is the chute immediately aft of the pilot's station.

Access to the chute is gained by opening the stairway door and lifting a hinged section of the stairs. This causes two size E aircraft engine starter cartridges operating off the primary battery bus cable to be fired, actuating a hydraulic cylinder which opens the external door at the lower end of the chute. Detonation of either of the two cartridges will cause the other cartridge to fire. When the door is fully open, a spring loaded latch engages the piston rod to hold the cylinder in the extended position. For maintenance purposes, the cylinder may be disconnected and the door opened manually from the ground.

The system of cables and linkages which operate the door at the bottom of the mock-up bail-out chute was designed for the mock-up only and is not intended to represent the system to be used in an airplane.

The configuration of the external door and the trajectory of an object dropped through the chute are to be the subjects of further studies.

A vaulting bar is provided at the top of the chute so that the crewman may hang from the bar to orient himself properly in the chute before dropping. In addition, a static line anchor is provided at the top of the chute.

Air escape from the lower deck may be made through the crew entrance door opening. The door is openable in flight.

GROUND ESCAPE

If the assumption is made that the stairway, decompression chamber, and bail out chute are unusable because of damage to the bottom of the airplane, escape must be made through exits which are at a considerable height from the ground. In addition, the convex shapes of the airplane fuselage makes the use of conventional slide ropes both difficult and dangerous.